SDAQ

- Using TFW to get triggers
  - L1 accept / L3 reject
- VRBC generates an interrupt
- Data is read from the VRB directly
- Histograms of data for different calibration voltages
- Pedestal and gains are calculated
- Result is stored in the database

SDAQ

- Pedestal and Gain per strip
- Pedestal Run
  - No calibration voltage applied
  - Simple average of all events
- Calibration Run
  - 2 different polarities
  - 5 predefined voltages per polarity
  - Gain (+error) is calculated

SDAQ

- Result is transferred to online database
  - Schema onl_smtcalib
  - Tables pedestals and gains
  - Columns: channel_id, run_number, gain, gain_error, error_flag

SDAQ

- Feedback loop:
  - New threshold is calculated on a SVX chip by chip basis
  - Pedestals of the latest run in database
  - Average pedestal p of strips is calculated
  - Average error s of strips is calculated
  - New threshold = p + 3 * s
  - The result is stored in the electronics database and used for the next download